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SCHOOL BASED PROGRAMME OPTIONS FOR GIFTED SECONDARY STUDENTS WITH A REVIEW OF THE LITERATURE AND EXISTING PROGRAMMES

A.H. Miller

REPORTS

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SCHOOL BASED PROGRAMME OPTIONS FOR GIFTED SECONDARY STUDENTS WITH A REVIEW OF THE LITERATURE AND EXISTING PROGRAMMES.

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Author: Ann H. Miller

TABLE OF CONTENTS

	Page
Introduction	1 - 6
Recognition of the Gifted	
Definition and Identification of the Gifted	6 - 8
Need for Programming for the Gifted	8 - 10
Special Groups Within the Gifted	10 - 12
Social and Counselling Needs of the Gifted	12 - 13
Programming for the Gifted	
Approaches to Student Programming	13 - 14
Programme Goals and Objectives	14 - 16
Programme Priorities - American National Survey Results	16 - 17
School Based Programme Options	18 - 26
Implementation Procedures	26 - 33
Survey of British Columbia Secondary Gifted Programmes	33
Conclusions	34 - 38
Appendix	39 - 43
Bibliography	44 - 45

INTRODUCTION

> In the story of the Hare and the Tortoise we all feel happy that "slow but steady wins the race." We never look at the wasted potential of the hare.
>
> (Durr,1964, p.3. in Hargreaves,1980)

In recent years, educators have shown an increasing awareness of the diversified needs of our children. A priority of education has become the providing of educational experiences which will best help all children reach their potential. To this end, programmes for special needs children such as the severely learning disabled, educably mentally retarded, visually and hearing impaired, and physically handicapped are being maintained throughout British Columbia.

But there is a group of our students who is not receiving the services they need to help them reach their potential - the gifted. Especially at the secondary level of schooling, many of these students are being "lost" because of inadequate services.

> Who are the gifted?
> How many are there?
> What are their special needs?
> What are the desirable educational strategies for coping with them?
>
> (Gallagher, Weiss, Oglesby, and Thomas, 1982)

Our gifted students can too often become discipline problems, the drop-outs, or the ones who are branded by teachers as sassy, lazy, and the troublemakers. Gifted youth have dropped out of school three to five times more often than the rest of the student population. (New York Times Service; Globe and Mail, Sept. 15, 1977) To assume that gifted students will "make it anyway" is a disservice

to a group of people needing to be prepared so they may become the citizens, and possibly the leaders, who we will so desperately need in the years to come.

The Canadian Education Association in 1978-1979 reported that not one Ministry of Education in Canada had grants specifically earmarked for gifted and talented students.

There are now existing programmes, concentrated at the intermediate level, for gifted elementary students in British Columbia. For the purpose of this report, all districts in the province were contacted during the 1981-1982 school year and information on gifted programmes at the secondary level was requested. Of the 75 districts contacted, 67 replied. (see Fig. 1.)

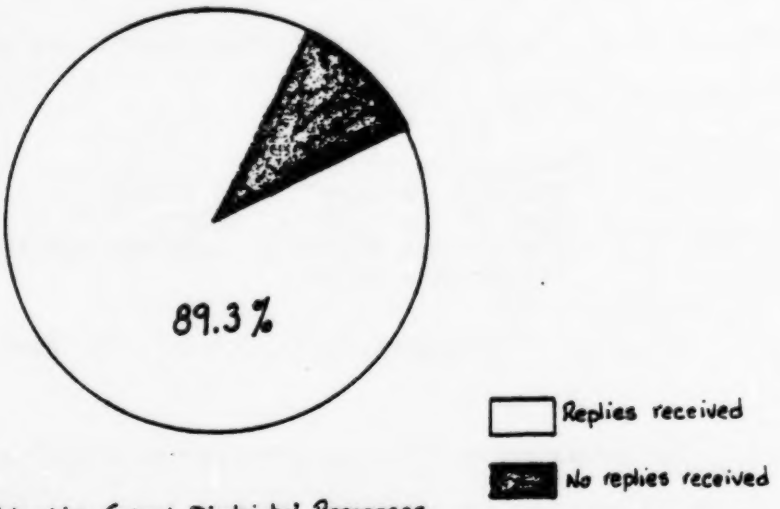


Fig. 1. British Columbia School Districts' Responses

There were twelve districts in B.C. which were supplying programmes for gifted secondary students in 1981-82 (see fig. 2.), although seven additional districts were supplying enrichment and many more districts indicated interest in researching local gifted needs.

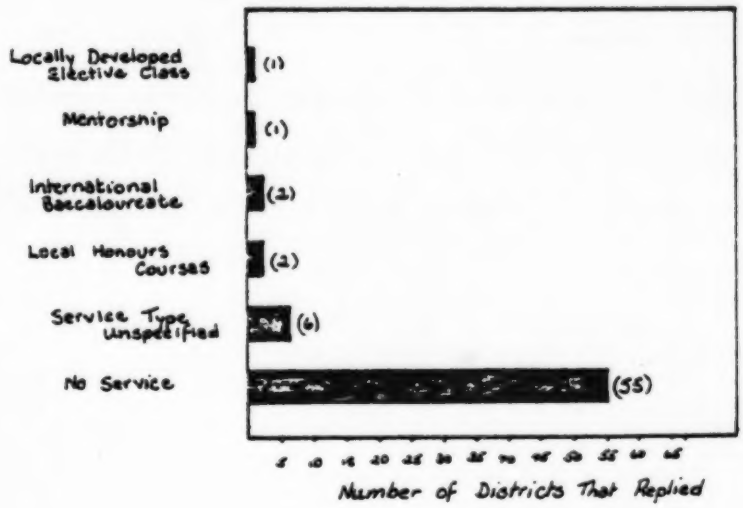


Fig. 2. Gifted Programming in Districts That Replied (1981-82)

Thorpe, in a 1979 E.R.I.B.C. report, indicated that thirty-seven districts in British Columbia were providing gifted programmes to elementary school children, predominantly in the intermediate grades. If we assume these figures are still accurate, and compare them to the twelve districts that replied to my information requests as providing secondary gifted programmes, there seems to be very few follow up programmes into secondary schools at a time when a new Ministry Guidebook on Gifted K-12 (1981) indicated provincial Ministry interest at all levels. (see Appendix for complete results.)

If we are to develop services for the gifted, schools and school boards will need information to consider the options available to them. The object of this report is to attempt to supply enough information so that choices can be made.

Before discussing the literature and programming, it is essential to differentiate between enrichment and gifted programmes.

Enrichment is a supplementing and extension of core curriculum by classroom teachers. As different students excel in different areas and at different times, ideally all students should benefit from some enrichment. (see fig. 3 and 4.)

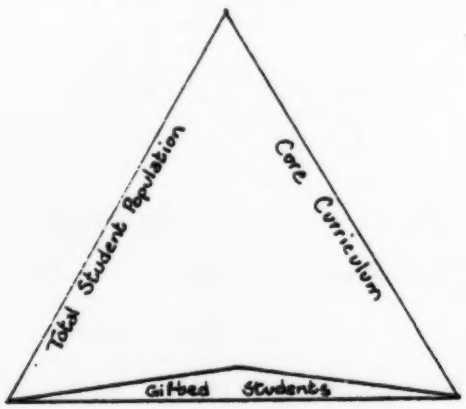


Fig.3. Basic School Model

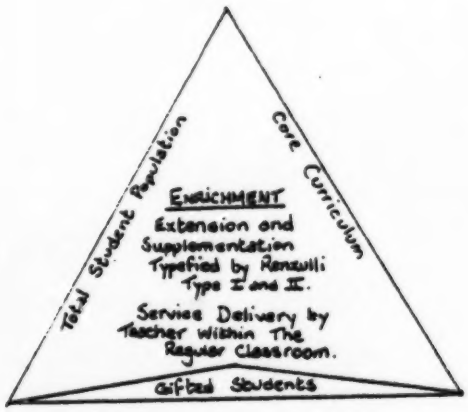

Total Student Population
Core Curriculum
ENRICHMENT
Extension and Supplementation Typified by Renzulli Type I and II.
Service Delivery by Teacher Within The Regular Classroom.
Gifted Students

Fig. 4. Enrichment Delivery Model

Gifted education, however, refers to the accommodation and development of learning experiences for those individual students who have exceptional abilities. (see fig. 5.) (refer to p. 13 for Triad Model Types.)

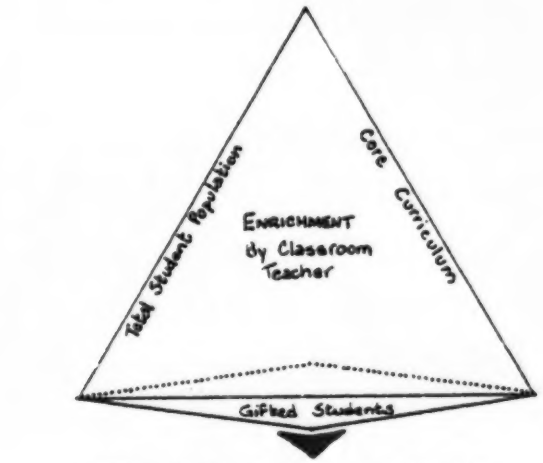


Fig. 5. Total Service Delivery Model

To summarize, enrichment should take place within the classroom for the benefit of all students; gifted education should be differentiated programming for exceptional students.

The literature on the gifted in North America during the last 20 years indicates many concerns and questions. It would be impossible in a project of

this size to provide a complete overview of the literature. The sources used for this project were made available through the University of Victoria, Peace River South Special Education, Jeanne White (Peace River South School District), Irene Hargreaves of the Edmonton School District, and James Gallagher of the Frank Porter Graham Child Development Center in Chapel Hill, North Carolina.

RECOGNITION OF THE GIFTED

Definition and Identification of the Gifted

The term "gifted", as a description of a specific group of people, was first associated with Lewis Terman in the 1920's (Pendarvis, 1981). Terman's giftedness was based on tested high Intelligence Quotient (I.Q.), and for the next two decades the term remained closely associated with only the top 1% of IQ scores. It wasn't until the 1950's and 1960's, in research as reported by J.P. Guilford (1967), that many intellectual and creative abilities which could not be measured by IQ tests were perceived as a part of intelligence.

Guilford's Structure of the Intellect (1967) was based on five major groups of abilities; cognition, memory, convergent production, divergent production, and evaluation.

Previously, Witty had written that giftedness should include any person whose performance was "consistently or repeatedly remarkable" in any field (1961). Torrance (1965) thought that curiosity should be included in a definition.

According to Rice (1970), it was the ability to develop and productively use the divergent, evaluative and creative thinking processes which separated the gifted from the norm. (Hargreaves, 1980)

Jordan and Keith (1971) emphasized creativity, fostered by psychological safety and freedom, as an integral part of giftedness.

J. Gallagher, in 1971, translated the research into a definition of giftedness which was adopted by the United States Office of Education. This definition (Marland, 1972), which has become the most widely used, included six abilities either singly or in combination; general intellectual ability, specific academic aptitude, creative or productive thinking, leadership ability, visual and performing arts aptitude, and psychomotor ability.

Although recognizing the usefulness of the U.S.O.E. definition, J.S. Renzulli thought it inadequate because it excluded motivational factors, compared abilities and processes which were non-parallel in nature, and allowed for misuse by practitioners who might choose only intellectual abilities as giftedness criteria. As a solution, Renzulli designed a model for giftedness called The Three-Ring Conception of Giftedness. This model showed the interaction between above average ability, task commitment and creativity. (see fig. 6.)

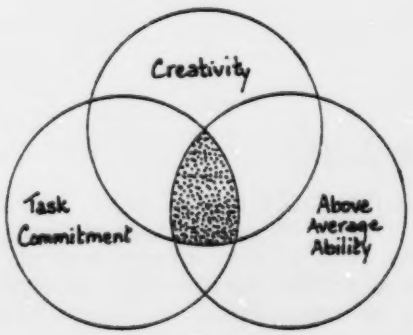


Fig. 6. Renzulli's Three-Ring Conception of Giftedness
(from Renzulli, 1977)

Extending the research and definition into the area of right-left brain hemispheres, DeBono (1969), Rubenzer (1979), and Blakeslee (1980) discussed giftedness and creativity as being closely linked with increased right brain activity. (Hargreaves, 1980.)

To identify giftedness, as defined by many abilities, the following procedures have been suggested:

- standardized test scores
- teacher referrals
- auditions and reviews of student products
- interviews
- peer nomination
- subject area examinations
- independent study proposals designed by nominees
- interest inventories
- creativity tests
- behavior checklists by parents, teachers and peers.

The above procedures could be used in whatever combinations preferred by a school-based nomination team.

Need for Programming for the Gifted

> We are losing (gifted) children in grades seven to nine. They can make it through almost any kind of elementary program, but once they discover junior high or high school is no improvement, a lot of them fall apart.
>
> (Gallagher, Weiss, Oglesby and Thomas, 1982, p.13.)

Terman (1925) identified the gifted as the largest group of underachievers (Clark, 1979). Clark herself wrote the following:

> The learners in the upper 2% of the intelligence scale need as much special instruction to continue their growth as the students at the lower end. Yet seldom are special classes provided, or resource personnel made available... This situation leads to loss of ability... as regression toward the mean is the observed outcome.
>
> (Clark, 1979, p.135.)

Banks (undated) felt that a lack of mental stimuli allowed gifted students to float through the school system. If the students then were faced with any kind of mental challenge, they would not have either learned the necessary skills or had the necessary experiences with which they could successfully meet the challenge. Most classrooms, geared for the average student,could too easily become boring for the gifted.

According to Hedbring and Rubenzer:

> There is little doubt that the gifted student too is handicapped. By virtue of his or her inability to gain the similar guarantees of access to individualized, differentially tailored instruction accorded other, less fortunate handicapped students, the gifted often find themselves at a distinct disadvantage in the classroom.
>
> (Hedbring & Rubenzer, 1979, p.338.)

Hargreaves (1980), through her extensive research of the literature, was also very concerned with the need for differentiated programming for gifted students. Differentiation in education meant a plan designed and suited for individual needs and differences. Since gifted students <u>are</u> different, as different as The Severely Learning Disabled (S.L.D.) or Educably Mentally Retarded (E.M.R.), they also should participate in some differentiated programmes at the secondary levels. However, the mainstream should still serve most of their

academic and social needs.

Hargreaves continues on to cite Gallagher (1964, 1979), Durr (1964), Torrance (1965), and Newland (1976) as having recognized the lack of awareness in our society and educational systems for the need of differentiated gifted programming.

Silverman (1980) noted that if gifted children experienced a more advanced curriculum in elementary school, they often found the junior secondary curricula to be repetition. In addition, the advanced placement or enriched curricula offered as "gifted programmes" in many junior secondary schools did not meet many of the needs of student programmes.

Gallagher (et al) had also perceived the gifted as losing out in the conflict between egalitarian and individual education. Witty (1961) discussed this same issue. He maintained that providing different programming for the gifted was not favouring one group, but was a part of attempting to provide suitable educational opportunities for all.

In accordance with Witty, Gallagher (1966) found than rather than fostering elitist feeling, programmes for the gifted actually resulted in the students' feeling more positive about themselves and others.

Special Groups Within The Gifted

Even within the group of the gifted, there are students who require special attention.

Pendarvis, Clark, and Gallagher were all concerned with gifted females. Gallagher (1975) referred to the studies of Aschner and Jenné (1967), Gallagher (1967),

Walberg (1969), Bachtold and Werner (1970), and Astin (1972) who showed that gifted girls were less academically aggressive and more concerned with peer attitudes than boys. Research done in 1976 by Solano (cited in Pendarvis, 1981) extended this idea by showing that in fact gifted girls were viewed more unfavourably by their peers than gifted boys. Both Pendarvis and Clark (1979) also emphasized peer and societal pressures on girls which affected their academic and professional progress.

There are many gifted students who are "underachievers". Clark defined them as those who showed exceptional performance on standardized measures of intelligence but who performed poorly on school-related activities. She discussed these students as having low self-concept, less popularity with peers, and lower aspirations. Pendarvis (1981) added to the list of behaviors a lack of persistence, and a lack of self-confidence, while Gallagher (1975) cited research by Shaw (1961) in which gifted underachievers not only displayed the above behaviors, but also had generally a negative outlook on life. Clark also referred to research by Roberts (1960) and Bachtold (1969) which found the incidence of underachievement in boys to be double that of girls.

Both Clark and Gallagher discussed "disadvantaged" students. These students were economically disadvantaged from poor lower-income families. Gallagher was concerned with the fact that because disadvantaged students often displayed weak verbal and semantic skills, their giftedness in other areas tended to be overlooked. Clark felt the attitude among many people, that giftedness could not emerge from poverty, was a real barrier for these students. This barrier was externally applied, therefore making it even more difficult to overcome.

"Culturally-different" students were another group discussed in the literature.

Pendarvis (1981) felt that cultural biases in testing often hampered identification of culturally different gifted students. These students who brought different values and symbol systems to their schooling should not be overlooked because of their differentness. (Clark 1979)

The literature outlined family, school and community as being the causes for differences and having profound effects on the special concern groups. Specialized programming and counselling could be built in to the gifted programmes to accommodate the students' differences and personal needs.

Social and Counselling Needs

Many of the researchers discussed counselling as an important requirement for the gifted. Hargreaves (1980) and Clark (1979) emphasized that while gifted adolescents may be well ahead of their peers in academics or mental capabilities, it did not lessen their need for physical, emotional and social acceptance as peer approval was still so important.

Gallagher cited various studies which showed high IQ scores and popularity as having a positive correlation in elementary school, but a negative correlation in secondary schools.

Clark extended her comments by noting that the need for peer approval could be manifested by academic conformity, rebellion, or confrontation.

Data was collected by Leaverton and Herzog (undated) through school records, standardized intelligence tests and measures of self-concept. They found that the gifted students ranked in the 25%ile of self acceptance.

If we refer back to the gifted females, underachievers, disadvantaged,

and culturally different, and recognize the importance of peer approval felt by most adolescents, counselling becomes a necessary component of gifted programming.

Although Terman's research (cited in Gallagher, 1964) disproved theories that gifted students tended to be weak, small in stature, and disturbed, gifted adolescents are at an age when they need to be reminded that they are acceptable and taught how to deal positively with their differences.

Jordan and Keith (1971), among others, outlined possible guidance and counselling responsibilities as including:

- to help gifted students work to capacity, accept their differences, and adjust socially.
- to assist in career and university evaluation.
- to realize the gifted are subject to parent, peer, and school pressures.
- to help the students cope with the pressures.

PROGRAMMING FOR THE GIFTED

Approaches to Student Programming

Renzulli (1977) designed the Enrichment Triad Model as a base for enrichment and gifted programmes. The three inter-related types of activities were:

Type I - General Exploratory Activities

Type II - Group Training Activities

Type III- Individual and Small Group Investigations of Real Problems.

As Types I and II activities developed students' feelings and thinking

processes, they were to be used as enrichment for the benefit of all students. These activities were to develop thinking processes and techniques which could then be effectively applied to any problem. Although Renzulli outlined many more processes, they were similar to Bloom's Taxonomies of Educational Objectives (1956).

Renzulli thought that Type III activities should form the essential component of any gifted programme. These individual projects would be directed by a resource person who would

- assist students in analyzing interest areas.
- provide students with appropriate methodology, tools of inquiry and references.
- help students communicate the results of their projects.

This type of student freedom of choice outlined by Renzulli was also mentioned in Pendarvis (1981) who felt that he was proposing a programme with respect for individual preferences. This could only result in an open learning environment.

A more generalized idea of programming, as cited by Hargreaves (1980), was found in the approaches of Passow (1979) and Ward (1980). Basic education balanced with specialization was similar to Hargreaves' gifted differentiation programming which was to remain a part of the total school experience.

Programme Goals and Objectives

Pendarvis (1981) thought programme goals should include quickening the pace of learning, broadening the range of experiences and knowledge, developing problem solving and research skills, and providing opportunities for in-depth study within students' interest areas.

Goals of programming for gifted students as outlined by Clark (1979) would

> - provide opportunities and experiences particularly suited to the needs of the gifted learners and through which they can continue developing potential.
> - establish an environment that values and enhances intelligence, talent, affective growth, and intuitive ability.
> - allow active and cooperative participation by the gifted students and their parents.
> - provide time, space, and encouragement for gifted students to discover themselves, their powers and abilities, and to become all that they can be.
> - provide opportunities for gifted students to interact with children and adults of various abilities, including the bright and talented, to be challenged to know and revere humanity for its uniqueness and its connectedness.
> - encourage gifted students to find their place in human evolution by discovering what abilities and in what areas they wish to contribute.
>
> (p. 138)

Critical thinking skills, aesthetic awareness, development of human values, self-appraisal and goal setting, and social relationships and skills were priorized in 1980 by Gold. (cited in Silverman, 1980.)

The objectives which should be pursued by gifted programming, as outlined by both Renzulli (1977) and Clark (1981), followed the goals set out by Pendarvis, Clark, and Gold.

Renzulli's objectives flowed through his Triad Model from skill-building, investigation, evaluation and expansion of personal interests through deductive thinking strategies, to a culmination in independent research and study.

Programme objectives of Clark centred a highly structured but "co-operative"

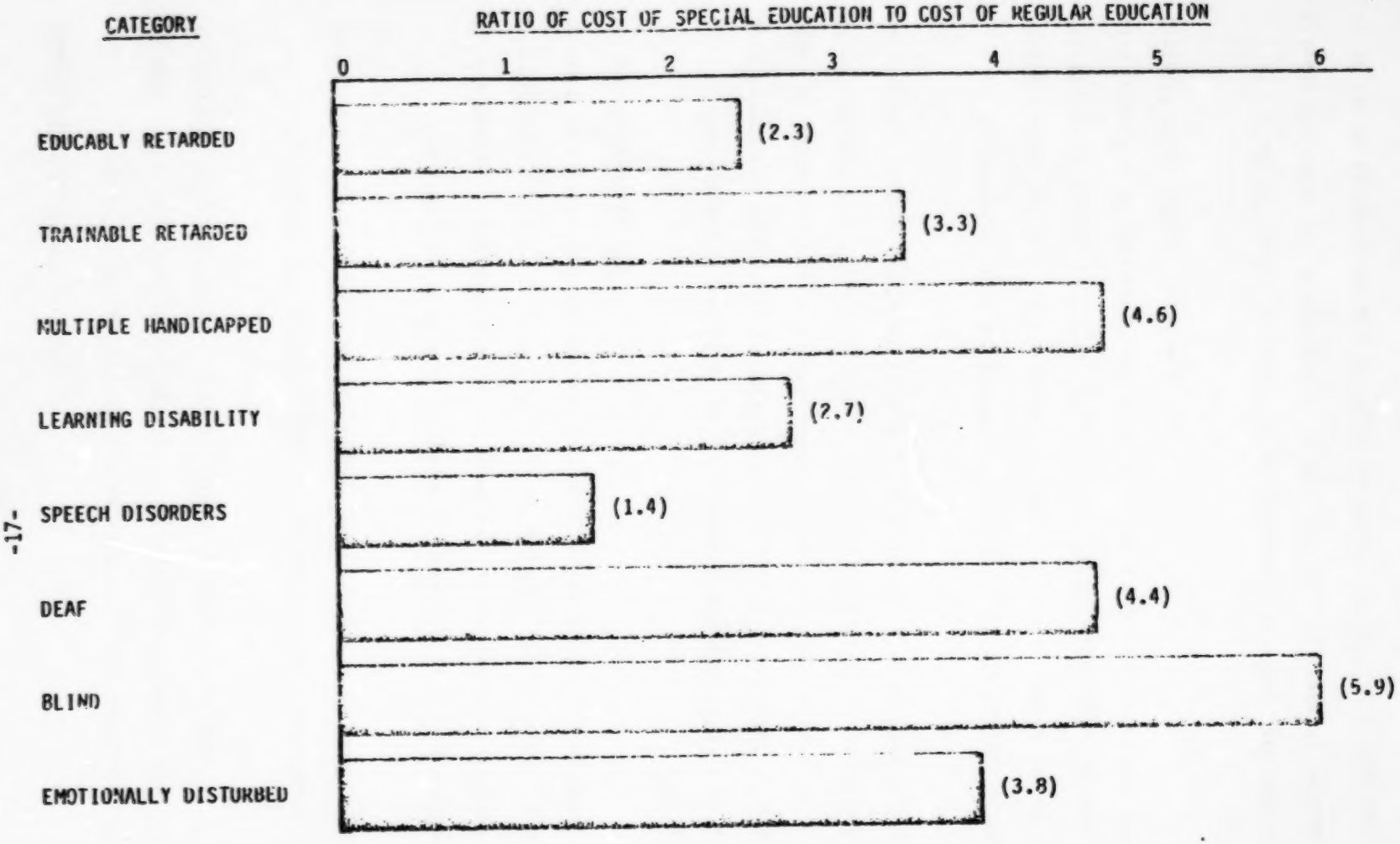
learning environment. The main feature would be the student as an active participant in the learning process which included; self-directed learning, decision-making, invention, inquiry, assessment, contracting, evaluation and conferences.

Programme Priorities - American National Survey Results

In 1982, a report on education of the gifted was prepared for the United States Office of Gifted and Talented (Gallagher, Weiss, Oglesby and Thomas). The report was a result of three national surveys conducted for state directors of gifted programmes, local programme directors, and parents, teachers, and school administrators.

The summary which follows includes only those parts of the report that were directed at secondary education.

1. Advanced placement or special classes (gifted students grouped together to receive instruction from a specially trained teacher), followed by independent study, were the most favoured programme strategies.
2. The most essential programme element cited by all groups surveyed was continuous inservice training for teachers of both regular and gifted students. Other important elements were development of support bases, a co-ordinator or director for secondary programmes, and materials and resources.
3. There was a median prevalence of 4% of students being identified as gifted. Less than half of these were receiving service.
4. Programmes for the gifted were the least expensive per pupil as compared with all other programmes for exceptional children. Total gifted programme costs were estimated at a cost ratio of 1.15 to 1.45 of the district per pupil costs. Programmes for other exceptional children generally ran over twice the average per pupil costs. (see fig. 7.)



(after Kakalik, Furry, Thomas & Carney, 1981)

Fig. 7. (from Gallagher, Weiss, Oglesby and Thomas, 1982)

School Based Programme Options

Types of programme options can be separated into horizontal or vertical strands. The many programming possibilities outlined in the literature fit into the strands discussed here, either in single or combination forms.

Horizontal programme options include exploration, enrichment, executive internship, cluster scheduling, cross-age tutoring, and interdisciplinary programmes.

The Exploration type of programming is delivered in the regular classroom by the teacher. The objective is to stimulate curiosity and the higher levels of cognitive learning as exemplified by Bloom's Taxonomy of Cognitive domain (1956). Bloom's levels of learning include knowledge, comprehension, application, analysis, synthesis, and evaluation.

Enrichment is delivered in the regular classroom, usually by the teacher. Some enrichment programmes are delivered by a specialist teacher to a small group of students in the classroom while the regular teacher works with the rest of the class. This type of programme focuses on expansion and supplementation of curriculum. Higher levels of cognitive learning may also be incorporated.

A community based programme is the Executive Internship. Students explore interest areas and are then paired with community professionals in any number of fields including law, medicine, civic administration, business, and the arts. The main objective of this programme is to have the students learn about their specific interest areas within the work world.

Cluster-scheduling, also called ungraded classrooms, are specially scheduled classes according to subject area. In this option, the class is ungraded (8, 9, 10, 11 or 12) so students advance at their own pace. As ability is the main prerequisite

for admission to this class, the students will probably be multi-aged. In order that students could attain all their courses needed for records of marks and graduation, competency testing could be provided for each grade level.

To have Cross-Age Tutoring as an option outside the classroom, student scheduling might be a problem. The objective of this programme is to provide a system of knowledge and interest sharing among students. Older students could share horizontally with each other or tutor younger students, while the younger students could also share horizontally. Cross-Age Tutoring usually occurs outside the regular classroom in a Library or Resource Room setting, and is supervised by a teacher.

The final type of horizontal option is the Interdisciplinary Programme. This course can be an alternative or addition to regular curricula. In a specially scheduled classroom, the students would study the inter-relationship of various curricula. A well-known example of Interdisciplinary Programming would be a Humanities course. In this course students would study English, Social Studies, Fine Arts, and perhaps Comparative Religion.

The horizontal programme types are shown in the following chart on page 20.

Horizontal Programme Possibilities

	Type	Instructional Setting	Objectives
1.	Exploration	- in the regular classroom	- to stimulate curiosity and higher levels of cognitive learning.
2.	Enrichment	- in the regular classroom	- to expand and supplement curriculum
3.	Executive Internship	- in the community	- to have each student paired with a community professional to learn about interest areas in the work world.
4.	Cluster scheduling (Ungraded classroom)	- in specially scheduled classroom - students scheduled into same class according to subject area	- to provide an ungraded and multi-age subject course in which all students could advance at their own pace. - competency testing could be provided in order for students to attain graded courses for records of marks.
5.	Cross-Age Tutoring	- outside regular classroom	- to allow students to learn from older gifted students or tutor younger gifted students. - to provide a system of knowledge and interest sharing among students.
6.	Interdisciplinary Programmes	- in specially scheduled classroom	- to provide a course (i.e. Humanities) which would combine knowledge areas and allow students to pursue a more in-depth and connected curriculum.

Vertical programme options are designed for in-depth research, advancement of knowledge, and independent student works. These programme types include acceleration, advanced classes, honours programmes, independent study and research, mentorship, and the elective seminar.

Acceleration, as a programme option, would mean that students would be able to advance at their own rate through the prescribed courses in any given subject area. For example, a grade eight student who is gifted in mathematics could be placed in a grade ten math class and be given automatic credit for Math 8 and 9 once competency was proven. Special classes are not needed for the acceleration options as students are placed at an appropriate and regularly scheduled higher level course.

Similar to Acceleration, Advanced Classes include the use of a specialty class, or the options of advancement to senior high or college level and to specialty courses. An advanced class, according to subject area, could be a special class in which students work at their competency levels. Or, an advanced class option could refer to the placement of students at senior high or college level courses. Senior high specialty courses could also be used, an example being a gifted grade nine mathematics student being placed in an algebra or calculus class.

An Honours programme is a special complete programme in which students take all their courses at an advanced level. In this option, the gifted students have their own separate class for academic courses. The best known honours programme is the International Baccalaureate which is currently being used in B.C. as part of the Lester Pearson College and is connected to a group of institutions around the world.

In an Independent Study/Research programme, students carry out their studies in a special classroom with the aid of a teacher/advisor. The objective of this type of option is for students to be able to explore their individual interest areas. The teacher would fulfil the role of advisor in areas such as processes, methodology, and research techniques.

The Elective Class, or Seminar, is similar to Independent Study/Research except it also incorporates the development of student skills. For example, the Elective Class would use Renzulli's Types II and III activities, while the Independent Study would focus mainly on Type III activities

The objective of a Mentorship programme would be to allow students to pursue an individual area and be supervised by mentors who would have the same interest and could share their expertise. This option would predominantly take place outside the school as the students would have to go into the community to work with their mentors. However a teacher/co-ordinator would be essential in order to act as liaison between school and mentors, as well as co-ordinate and evaluate the programme.

In the following chart on page 23, the vertical types of programmes are briefly outlined.

Vertical Programme Possibilities

	Type	Instructional Setting	Objectives
1.	Acceleration	- in the classroom	- to give students the opportunity to move through the system at their own rate.
2.	Advanced Classes	- in special classroom or use of senior high or college classrooms	- to allow students to attend classes at their competency level, according to subject area expertise.
3.	Honours Programme (i.e. International Baccalaureate)	- in special classes for full time-table	- to give students a more in-depth and advanced general education.
4.	Independent Study/Research	- in special classroom with Teacher/Advisor	- to explore particular individual interest areas. - to use teacher as advisor for processes, methodology, etc.
5.	Elective Class (Seminar)	- in special classroom	- to develop student skills - to apply the skills to individual research.
6.	Mentorship	- in the community	- to match community experts with students - to allow students to pursue individual interest area and be supervised by mentor within the area of expertise.

Silverman (1980) outlined the following options for rural gifted students; independent study "hot lines", mobile enrichment units, itinerant teachers and correspondence courses with mentor follow-up if feasible. Since the teachers and special materials would have to travel to the students, these options would be difficult and costly to implement.

The literature suggests that Horizontal programme types alone would not meet the needs of gifted students. These types of options, because of their enrichment by breadth and range, could be suited for many students other than the gifted. For this reason they could possibly be incorporated into the regular classroom for the benefit of many students. If Horizontal options are to be used for the gifted, I think they should be used as strands which supplement the Vertical options. This type of combination would then satisfy both breadth and in-depth exploration and studies. (see fig. 8.)

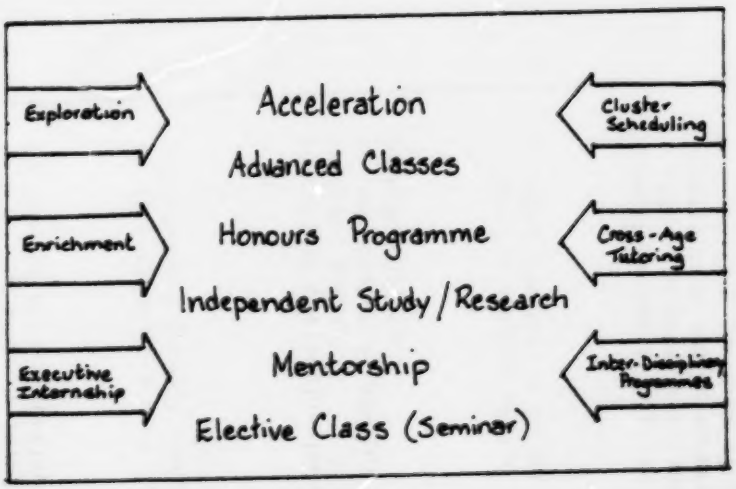


Fig. 8. School Based Programming Options

The programme options outlined here do not have to remain as separate types. Aside from the combining of Horizontal and Vertical options as previously mentioned, the Vertical options can also be blended into numerous different combinations. For example, Advanced Classes and an Elective Seminar could be combined into a programme, or Mentorship and Independent Study/Research could combine. (see fig. 9.)

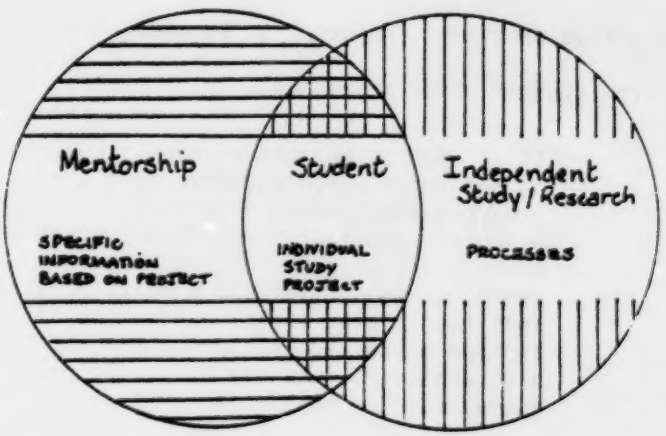


Fig. 9. Model For Independent Study / Mentorship Combination

As it is important that programmes for the gifted should fit the individual students, the school, and the expectations of administrators, teachers and parents, it would be desirable for a school to establish its own 'hybrid' programmes.

A programme which is successful in one school may be totally inappropriate for another; a programme which is suitable for one student may be unsuitable for

other students. For this reason, there does not exist a "right" or a "wrong" programme. The suitability of a programme is defined by its fitting the needs of students and fulfilling the priorities and expectations of school staff and parents. As long as components such as student identification procedures, support bases and inservice are consistent, various schools within a school district could have totally different programming options.

Implementation Procedures

A gifted programme, in order to succeed, must follow through a series of stages from student needs assessments to evaluation procedures.

> It is wise to conduct a needs assessment to determine which students have the greatest need for differentiated programming. A small segment of the gifted population is thus identified as having specific learning needs requiring special services. This tactic also avoids having the gifted program perceived as a privilege for the high achievers, who may be challenged adequately in the regular program.
>
> (Silverman, 1980, p.32.)

I think Silverman discusses an extremely important point. If secondary teachers were asked to name the gifted students in their classes, most of them would probably name the high achievers. There may be two reasons for this; the teachers may not be familiar with "giftedness", and the high achievers are a group who teachers enjoy, while often gifted students can be classroom troublemakers or underachievers who are "unworthy" of special privileges.

The Implementation Table outlines the major steps, objectives and methods that could be followed in order to implement a programme.

Implementation Table

	Step	Objectives	Methods
1.	Survey of Student Population	- to anticipate number of students eligible for the programme.	- review enrollment in existing elementary programmes. - review total student enrollment.
2.	Analysis of Available Resources	- to collect data on existing services - to identify available resources.	- review any existing programmes to prevent duplication of services. - determine staff awareness, interests and expertise. - examine materials, resources, fundin community support and resource personnel.
3.	Development of Programme	- to provide a programme philosophy.	- set programme philosophy, goals, and objectives.
4.	Identification and Screening Process	- to determine eligibility criteria. - to identify appropriate students.	- review definition of gifted. - establish appropriate criteria such as: a) aptitude tests b) standardized achievement tests c) nomination (peer, parents, teachers, counsellors, self) - use chosen devices and procedures to screen and identify students.
5.	Determination of Students' Needs	- to analyze the interests, learning styles and needs of chosen students.	- administer interest-a-lyzer type surveys and learning style surveys to students. - graph individual student needs profiles. - graph group needs profiles.

Implementation Table (cont'd)

	Step	Objectives	Methods
6.	Programme Design	- to evaluate management options. - to design programme prototype.	- review instructional alternatives. - choose best alternatives or combinations based on a) determination of students' needs b) programme goals and objectives.
7.	Programme Organization and Operation	- to develop a schedule. - to select appropriate teaching strategies. - to determine necessary materials.	- consider timetabling and facilities best suited for chosen programming. - review programme objectives. - examine types of student behavior (cognitive and affective) anticipated. - select and develop materials based on: a) teaching strategies b) programme objectives c) student needs
8.	In-Service	- to determine staff inservice needs. - to provide inservice to school staff and parents. - to continue inservice support throughout the school year.	- school staff and programme teacher/co-ordinator cooperatively plan inservice based on a) staff requests b) teacher/co-ordinator recommendations. - schedule and conduct workshops for teachers and parents. - provide resources for teachers to be able to use with their gifted students in their classrooms. - see Fig. 10.
9.	Support Services	- to provide an inter-related network of support for: classroom teachers teachers of the gifted administrators counsellors parents students	- see Fig. 10 and Fig. 11.

Implementation Table (cont'd)

	Step	Objectives	Methods
10.	Ongoing Evaluation and Assessment Procedures	- to provide an evaluation of the programme.	- specify criteria and communication procedures such as a) checklists b) questionnaires c) interviews.
		- to review and assess the effectiveness of programme processes.	- re-evaluate identification procedures - re-examine programme goals, objectives and implementation (teaching strategies, materials, etc.)
		- to review the benefits of the programme.	- evaluate students' cognitive and affective growth.
11.	Revision	- to provide programme revisions as needed.	- document successful and unsuccessful activities. - revise, as needed, programme processes such as a) identification procedures b) timetabling c) teaching strategies d) materials.

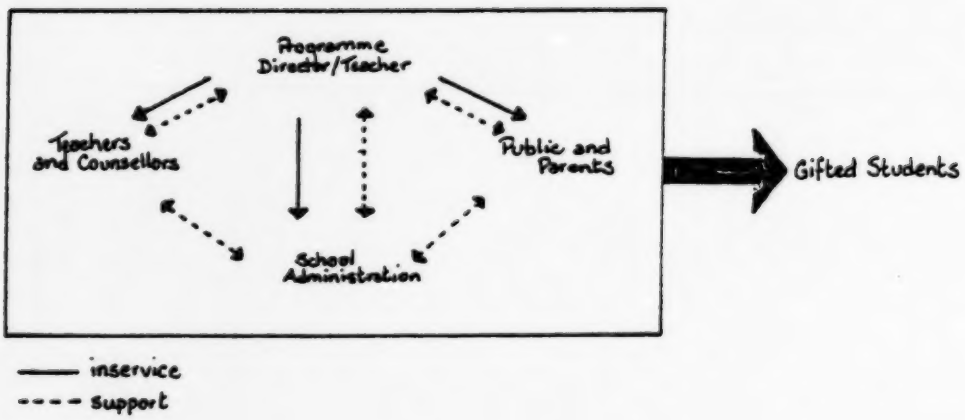


Fig. 10. Support System and Inservice for School Based Programming

Support services play an important role in the success and maintenance of special programmes. The following table outlines the inter-related support roles and responsibilities of personnel involved in maintaining a gifted programme.

SCHOOL DISTRICT ROLES AND RESPONSIBILITIES

COORDINATOR	TEACHER	STUDENT	PRINCIPAL	CENTRAL OFFICE STAFF
-Design, develop, coordinate, and evaluate the program. -Develop and implement curriculum (techniques, materials) related to enriching the total program. -Prepare financial, statistical, and descriptive reports as needed to develop, maintain, and account for the program. -Coordinate identification and certification procedures. -Serve as a consultant and resource to the staff, students, and parents involved with the program. -Participate as part of the Educational Services staff. -Promote public relations activities at the local, county, and State levels.	<u>Classroom:</u> -Provide an enriched individualized program for the gifted. -Assist students in planning, organizing, and evaluating tasks. -Screen, develop, and provide appropriate materials for the gifted. -Evaluate pupil progress. -Interpret the program to parents. <u>Itinerant:</u> -Support classroom teachers and building principals in their teaching relationships with the gifted and talented. -Provide an enriched extension of the regular curriculum for gifted students in intra- or extra-classroom settings. -Demonstrate diverse methods of instruction appropriate for the gifted, such as problem solving, independent study, etc.	-Attend regular or specially scheduled programs or events. -Complete selected tasks. -Communicate and share learning experiences with peers, teachers, and parents. -Practice decision-making skills. -Develop self-awareness and understanding. -Participate in planning and evaluating learning experiences within the program.	-Become knowledgeable about the unique needs of the gifted. -Become acquainted with gifted students in the school. -Stimulate interest in and concern for the gifted. -Urge teachers to provide qualitatively-differentiated programs for the gifted in their classrooms. -Cooperate with district personnel in identifying the gifted and implementing programs for them. -Encourage and assist teachers in securing appropriate instructional materials for the gifted. -Meet regularly with parents to explain the program to them. -Work cooperatively with other personnel in objectively evaluating the program.	-Provide the necessary staff to implement and support all identification, program development, material acquisition, inservice training, publicity, evaluation, and related procedures that are required to provide a qualitatively differentiated program for the gifted and talented. -Define and coordinate the requisite roles and responsibilities of the school board, superintendent, psychologist, psychometrist, counselor and classroom teacher.

Fig. 11 (from Kaplan, 1974)

Aside from the above procedures, implementation also includes the issues of teacher suitability, and teacher/advisor responsibility.

Bishop (1968), Gallagher (1964, 1975), and Panmwitt (1978) included the following traits as being desirous for teachers of the gifted:

- show versatility of interests in literature, culture and community.
- have mental superiority and high achievement in their education.
- prefer student-centered activities but maintain systematic, orderly classrooms.
- have a keen sense of humour and abundance of physical energy.
- show creativity and originality in own work.
- be an experienced teachers with a high level of maturity.

Clark (1979) emphasized the need for a co-ordinator for the gifted programmes who would not be teaching any other courses. A programme teacher/co-ordinator could either work solely in one school, or serve a few schools as itinerant teacher.

Combining the ideas of many of the researchers, the director/teacher/advisor/co-ordinator would be responsible for:

- identifying, advising, counselling and evaluating the students.
- teaching the "seminar" or class.
- providing in-service to regular teachers and parents on gifted students and their needs in the classroom and community.

- developing the programme in liaison with school administrators and priorities set for gifted students.
- assisting students analyze interest areas.
- providing students with appropriate methodology, tools of inquiry and references.
- helping students communicate the results of their projects.
- involving the parents.

The implementation procedures presented here are an outline. In order to set up gifted programming district-wide or within a school, two excellent sources for complete implementation are the Ministry of Education's Enrichment and Gifted Education Resource and Kaplan's Providing Programs for the Gifted and Talented: A Handbook.

Survey of British Columbia Secondary Gifted Programmes

As briefly mentioned in the Introduction, the researcher wrote to all school districts in the fall of 1981 in order to find out the present situation in B.C. At that time, fewer than 50% of the districts replied, so questionnaires requesting information about present programmes were sent in the spring of 1982. Of both sets of requests sent to the 75 B.C. school districts, 67 replies were received. The responses ranged from districts which had gifted programmes to districts which didn't have programmes but were interested in researching local needs. Some districts had extensive enrichment programmes, but because of the giftedness emphasis of the project, they were not included as programmes in the statistics. See the Appendix for complete results.

CONCLUSIONS

> The relatively few gifted students who have had the advantage of special programs have shown remarkable improvements in self-understanding and in ability to relate well to others, as well as improved academic and creative performance. The programs have not produced arrogant, selfish snobs; special programs have extended a sense of reality, wholesome humility, self-respect and respect for others. A good program for the gifted increases their involvement and interest in learning through the reduction of the irrelevant and redundant.
>
> (S.P. Marland, in Clark, 1979, p. 134.)

Within the spectrum of general education, we cannot ask the majority of our students to be satisfied with conformity while we single out only the gifted for explorations into uniqueness. Yet there will always be the problem of the burden of regular classroom responsibilities. We cannot expect teachers to take on another strategy unless there is extensive inservice to help them. Inservice and materials could be provided by the teacher of the gifted.

All students deserve the opportunity to broaden their thinking skills, receive appropriate enrichment, and explore academically and artistically. With the provision of a support base, regular teachers could provide more divergent learning experiences for all students.

Yet as the literature and data concur, students defined and identified as gifted, need to explore further and into greater depth. The following conclusions are intended to summarize the need for special programming for the gifted, and hopefully to offer some direction for implementation.

1. There is a group of students at the secondary level of education who is not receiving appropriate services. Many districts in British Columbia provide

services for their elementary gifted students. As it has been shown that we lose many of our gifted students to boredom, underachievement or dropping out in our secondary schools, we must begin to provide services to them.

2. In British Columbia, funding has been made available to special needs groups in order to maintain appropriate programming. As outlined in the American National Survey (1982), costs for gifted programming run far below the costs for other special needs children. Yet there are many districts which have only elementary gifted programmes, and some districts which do not have any gifted programmes.

3. Gifted students need differentiated programming. Those students who received special services in elementary school will be aware of their abilities. On entering junior secondary they may be faced with either repetitious or unchallenging curricula, and become dissatisfied or turned off. Unidentified gifted students, perhaps unaware of the reasons for their possible dissatisfaction and boredom, may also turn to the same negative or neutral behaviors. Junior secondary seems to be the most deprived level of gifted education. Elementary gifted programs offered in some districts and specialized curricula in senior secondary schools at least provide some recognition and service for gifted students at these levels.

4. Among the gifted, there are special needs groups such as underachievers, culturally different, disadvantaged, and gifted girls.

5. All gifted students, and especially the above groups, need social guidance and counselling. As adolescence is a time of emotional instability, high energy and varying maturation spurts, counselling and guidance should be a part of any gifted programme. These students need advocates within the schools to help

them deal with their differences and to convey their special needs to teachers and administrators.

6. As the nature of giftedness is so complex, programmes must allow for freedom of individual differentiation. The goals of a programme should therefore include opportunities for independent exploration. Fixed and content-oriented curricula may not allow for this freedom of personal exploration. A goal of gifted programming should be to develop the mind, not strain the memory. I think that a gifted programme, based on an option like Independent Study/Research and which incorporated Renzulli's Triad Model, would fulfil the needs of gifted students and the philosophical priorities of programming. Horizontal type strands, if used, should be combined with Vertical programming options.

7. As students, schools, and districts are all diversified in their needs, no single programme is appropriate for everyone. Programmes need to be developed for the uniqueness of students within their different schools and within their community and district settings.

8. Along with the implementation of a programme for gifted students, ongoing in-service and programme assessment is essential.

9. The teacher/co-ordinator of a gifted programme, as well as displaying various desirous traits, should be highly motivated and interested in the area of gifted education. It will take much energy and commitment to both teach and co-ordinate a programme suited to individual student, school and community needs.

10. Because of the nature of gifted students, the teacher/co-ordinator should be involved in as much professional development as funding and time allow.

In the past, education for gifted students has not been a priority in our school system.

Some of the reasons and excuses for not providing for this special needs group have been:

- differentiated programmes for gifted students would foster elitism.
- democratic education means the same for everyone.
- special education funding is better spent on less able students.
- gifted students will make it through the system and do all right anyway.

As previously discussed in the literature review, these excuses are myths. If we are willing to act upon the premise that less able students should definitely receive differentiated programming to meet their needs, why are we so reluctant to recognize the need for differentiated programming for another group of special needs students?

School-based programming for secondary gifted students would allow the students to receive different programmes suited to their unique needs, as well as remain in the mainstream, which is so important to this age group.

These are times of financial restraint. But this cannot be used as an excuse against secondary gifted education. School-based programmes, especially combinations such as Independent Research, Seminars, and Mentorship, would provide quality gifted education at a low cost. The major portion of cost would be the teacher/co-ordinator's salary because material costs would be minimal and physical plant or transportation costs would be non-existent.

Providing quality gifted education would mean publicly recognizing and admitting that these students exist and deserve an education fitted to their needs.

If the goal of education in British Columbia is truly to provide all students with the opportunity to fulfil their potential, how can we neglect our gifted students any longer?

> In summary, the least restrictive environment for gifted children is that which provides instruction commensurate with ability and which includes provisions for social and emotional development.... Through the combined efforts of general and gifted education personnel we can identify talented children and change their education from one of benign neglect to one of productive action.
>
> (Pendarvis, 1981, p. 492.)

APPENDIX

School District Replies To Request for Information

District	Number	Reply Received	Gifted Service Delivery	Type of Programme
Abbottsford	34	Yes	Yes	honours courses
Aggassiz-Harrison	76	Yes	No	
Alberni	70	Yes	Yes	honours courses
Armstrong-Spallum	21	No	?	
Arrow Lakes	10	Yes	No	
Burnaby	41	No	?	
Burns Lake	55	Yes	No	
Campbell River	72	Yes	No	
Cariboo-Chilcotin	27	Yes	No	
Castlegar	89	No	?	
Central Coast	49	Yes	No	
Central Okanagan	23	Yes	No	
Chilliwack	33	Yes	No	
Coquitlam	43	Yes	Yes	unspecified types
Courtenay	71	Yes	No	
Cowichan	65	Yes	No	
Cranbrook	02	No	?	
Creston-Kaslo	86	No	?	
Delta	37	Yes	No	
Fernie	01	Yes	No	
Fort Nelson	81	Yes	No	
Golden	18	Yes	No	
Grand Forks	12	Yes	Yes	unspecified types
Greater Victoria	61	Yes	Yes	school based, unspecified types
Gulf Islands	64	Yes	No	
Hope	32	Yes	No	
Howe Sound	48	Yes	No	
Kamloops	24	Yes	Yes	elective class, "extended studies"
Keremeos	16	Yes	No	
Kettle Valley	13	No	?	
Kimberley	03	Yes	No	
Kitimat	80	Yes	No	
Lake Cowichan	66	Yes	No	

District	Number	Reply Received	Gifted Service Delivery	Type of Programme
Langley	35	Yes	Yes	International Baccalaureate and some independent study courses.
Lillooet	29	Yes	No	
Maple Ridge	42	Yes	No	
Merritt	31	Yes	No	
Mission	75	Yes	No	
Nanaimo	68	Yes	No	
Nechako	56	Yes	No	
Nelson	07	Yes	No	
New Westminster	40	Yes	No	
Nishga	92	Yes	No	
North Thompson	26	Yes	No	
North Vancouver	44	No	?	
Peace River North	60	Yes	Yes	mentorship
Peace River South	59	Yes	No	
Penticton	15	Yes	No	
Powell River	47	Yes	Yes	unspecified types
Prince George	57	Yes	No	
Prince Rupert	52	Yes	No	
Princeton	17	Yes	No	
Qualicum	69	Yes	No	
Queen Charlotte	50	Yes	No	
Quesnel	28	Yes	No	
Revelstoke	19	Yes	No	
Richmond	38	Yes	No	
Saanich	63	Yes	No	
Shuswap	89	Yes	No	
Smithers	54	Yes	No	
Sooke	62	No	?	
South Cariboo	30	Yes	No	
Southern Okanagan	14	Yes	No	
Stikine	87	Yes	No	
Summerland	77	Yes	Yes	unspecified types
Sunshine Coast	46	Yes	No	
Surrey	36	Yes	Yes	International Baccalaureate
Terrace	88	Yes	No	

District	Number	Reply Received	Gifted Service Delivery	Type of Programme
Trail	11	Yes	No	
Vancouver	39	Yes	Yes	unspecified types
Vancouver Island North	85	Yes	No	
Vancouver Island West	84	Yes	No	
Vernon	22	Yes	No	
West Vancouver	45	Yes	No	
Windermere	04	Yes	No	

Districts With Extensive Enrichment Programmes

Chilliwack
Cowichan
Kitimat
Langley
New Westminster
Penticton
Vernon

Districts That Did Not Have Gifted Service Delivery But Personnel Were Interested In Researching Local Needs and Possibly D eloping Programmes

Burns Lake
Cariboo-Chilcotin
Central Okanagan
Courtenay
Cowichan
Fernie
Golden
Gulf Islands
Kitimat
Lake Cowichan
Lillooet
Maple Ridge
Mission
Nanaimo
Nelson
Prince Rupert
Qualicum
Richmond
Shuswap
Southern Okanagan
Stikine
Vancouver Island North
Windermere

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